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APPLICATION NO	. FILING	DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/891,197	06/26	/2001	Stanley Gene Boyer	07099-1466-00000	9386	
826	7590	7590 07/03/2006		EXAMINER		
	& BIRD LLP		BROOKS, MATTHEW L			
	AMERICA PLA H TRYON STR	AZA LEET, SUITE 400	00	ART UNIT	ART UNIT PAPER NUMBER	
CHARLOTTE, NC 28280-4000				3629		
			DATE MAILED: 07/03/2006	DATE MAILED: 07/03/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/891,197	BOYER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Matthew L. Brooks	3629				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on 12 A 2a)□ This action is FINAL. 2b)⊠ This 3)□ Since this application is in condition for allowal closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro					
Disposition of Claims						
4) ⊠ Claim(s) 1-22 is/are pending in the application. 4a) Of the above claim(s) 14 and 17 is/are with 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-22 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/o	drawn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on 21 December 2000 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	tre: a) \square accepted or b) \boxtimes object drawing(s) be held in abeyance. See tion is required if the drawing(s) is object.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Di	ate				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	6) Other:	atent Application (PTO-152)				

DETAILED ACTION

Examiner for purposes of examination used the amended claims submitted on 4/4/2006.

Drawings

- 1. The drawings **5 and 6** are <u>no longer</u> objected to because there are no lead lines indicating what is going on as described in the specification.
- 2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the method of notifying entities of events steps claims 1 or 2 (a)-(e); (for example); must be shown on a flow chart or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: Examples shown in specification are not in the drawings 5 and 6 (see above).

Appropriate correction is required.

Claim Rejections - 35 USC § 112 1st and 2nd

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Applicant has laid out very broad definitions for the terms "entity" and "event" but has failed to define "response". The invention is not enabled because the

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multitude of responses that may be possible to that of an event occurring is limitless and for examiner to figure out all of the possibilities of responses would be undue.

- 6. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims have at least two possible interpretations. One that upon detection of a first event there is a response that triggers a second event and also there is a notification sent to a first entity. The other interpretation and the more likely one is that a "response" is the exact same as a "notification" as taught in Claim 1(c) "automatically transmitting in response to... a notification" also see claim 6 wherein a response is a notification.
- 7. Other problems in regards to the claims (ie claim 1);

In claim 1 (c) the Applicant states "...and initiating the first response to the occurrence of the first event,..." the limitation fails to further limit because the first response was already initiated in step (b) where the response triggered a second event/

Claim 1(d) "...determining whether the first entity has previously subscribed..." this also fails to further limit in that already done in step 1 (c) when transmitted the notification to the first entity

Also the claims (ie; claim 1) is rejected for the omission of an essential step; that of having a first entity subscribe to receive a notification, with out which the invention would not work at all.

8. Further still, claim 1 (e) and claim 11 there is a lack of antecedent basis for "...a notification to *the* heterogeneous system associated with a second entity..."

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9. On a related note Claim 10 the system is omitting essential structures for the performance of the invention as claimed. Applicant shows a system with a memory and processor but failes to claim a detection system and GUI's to where notifications are sent and certainly other components are missing. Further confusion lies in 10 (b) the processor is that "...monitoring information from a memory..." or the memory just previously claimed? Applicant is asked to specify and aide Examiner in cleaning all informalities. Also for clarification purposes is the "integrated notification system" in claim 1 the same as the "processing system" in claim 10.

8. Claims 21 and 22 are indefinite as well. Applicant appears to be attempting to change the definition of event as found with in the specification. "wherein the <u>first type</u> <u>of events is information</u> associated with a plurality of entities..." This is what the notification comprises not the actual event as taught in Applicant's specification pg 3, 7-15.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the

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United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-4 and 6-13 and 15-16 and 18-22 are rejected under 35 U.S.C. 102(e) as being anticipated by patent number 6,496,568 Donald R. Nelson (Nelson).

11. With respect to Claims 1 and 9: Nelson discloses

A method for notifying entities of events in an integrated event notification system comprised of a plurality of heterogeneous systems, each entity associated with a different one of the heterogeneous systems, (Column 1, 35-50) Applicant has defined "system" as an individual or entity with in the specification (See page 3, 1-5) and "event" and "entity" very broadly (See Page 3, 7-25 and Page 4, 1-8) the method comprising:

- a. detecting a first event of a plurality of events, with the detecting of the event including monitoring information from a memory for the occurrence of an event and publishing the first event upon occurrence of the first event (C1, 50-55; which detects and receives an event, when determines the set of "subscribers" must be memory then provides notification/publish),
- b. wherein occurrence of the first event triggers occurrence of at least a second event resulting from a first response to the occurrence of the first event; (Column 2, 1-10 wherein the second event may be receiving a customer response.)
- c. automatically transmitting, in response to the detecting of the first event and without user intervention, a notification to the heterogeneous system associated with a first entity of the first event, the first entity having previously subscribed to receive notification of the first event and initiating the first response to the occurrence of the first event (C1, 50-67),

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d. with the automatically transmitting of the notification to the heterogeneous system associated with the first entity including determining whether the first entity has previously subscribed to receive notification of the event; (Column 1, 50-66) and

e. automatically transmitting, without user intervention, a notification to the heterogeneous system associated with a second entity of the second event (Column 2, 1-16 Examiner considers "real time data system" to be a second entity because Applicants specification defined systems as entities on Page 3, 1-3. Also, second entity could be, among many things, the "paging system" See Fig 1, 162), the second entity initiating a second response to the occurrence of the second event. (Column 2, 1-16; an alternative embodiment shown with an airline system). the second entity having previously subscribed to receive notification of a second type of events comprising the second event, wherein the first type of events is different that the second type of events (Column 3, 60-68 Examiner considers this to be another customer of a different flight that registered to be notified of its cancellation, delay, or event and Inherently if the two entities were on different flights the type of events to be notified of would be different, such as flight 408 is cancelled and flight 409 is delayed).

12. With respect to **Claim 2**: Nelson discloses

A method for notifying entities of travel-related events in an integrated event notification system communicably connecting a plurality of entities, the method comprising; (Column 1, 35-50) Applicant has defined "system" as an individual or entity

with in the specification (See page 3, 1-5) and "event" and "entity" very broadly (See Page 3, 7-25 and Page 4, 1-8)

- a. detecting a first travel-related event of a plurality of travel-related events, with the detecting of the first travel-related event including monitoring information from a memory for the occurrence of a travel-related event and publishing the first travel-related event upon occurrence of the first travel-related event (C1, 50-55; which detects and receives an event, when determines the set of "subscribers" must be memory then provides notification/publish),
- b. wherein occurrence of the first travel-related event triggers occurrence of at least a second additional travel-related event resulting from performance of a first activity in response to the occurrence of the first travel-related event (Column 2, 1-10 wherein the second event may be receiving a customer response.);
- c. automatically transmitting, in response to the detecting of the first travelrelated event and without user intervention, a notification to a first entity of the first
 travel-related event, the first entity having previously registered to receive notification of
 the travel-related event and initiating the activity in response to the notification (C1, 5067),
- d. with the automatically transmitting of the notification to the first entity including determining whether the first entity has previously subscribed to receive notification of the travel-related event (Column 1, 50-66); and
- e. automatically transmitting, without user intervention, a notification to a second entity of the second travel-related event (Column 2, 1-16 Examiner considers "real time

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data system" to be a second entity because Applicants specification defined systems as entities on Page 3, 1-3. Also, second entity could be, among many things, the "paging system" See Fig 1, 162), the second entity initiating performance of a second activity in response to occurrence of the second travel-related event (Column 2, 1-16; wherein Nelson discloses notifying the customer and the "real time data system" which responds by updating the system and Column 2, 1-16; an alternative embodiment shown with an airline system), the second entity having previously subscribed to receive notification of a second type of events comprising the second event, wherein the first type of events is different that the second type of events (Column 3, 60-68 Examiner considers this to be another customer of a different flight that registered to be notified of its cancellation, delay, or event and Inherently if the two entities were on different flights the type of events to be notified of would be different, such as flight 408 is cancelled and flight 409 is delayed).

13. With respect to Claim 10: Nelson discloses

A data processing system comprising,

- a. a memory having program instructions;
- b. and a processor responsive to the program instructions for (See Nelson Fig 2):
- b1. detecting a first travel-related event of a plurality of travel-related events, with the detecting of the first travel-related event including monitoring information from a memory for the occurrence of a travel-related event and publishing the first travel-related event upon occurrence of the first travel related event (C1, 50-

55; which detects and receives an event, when determines the set of "subscribers" must be memory then provides notification/publish),

b2.wherein occurrence of the first travel-related event triggers occurrence of at least a second travel-related event resulting from performance of a first activity in response to the occurrence of the first travel-related event (Column 2, 1-10 wherein the second event may be receiving a customer response.);

b3. automatically transmitting, in response to the detecting of the first travel-related event and without user intervention, a notification to a first entity of the first travel-related event, the first entity having previously subscribed to receive notification of the first travel-related event and initiating the first activity in response to the notification (C1, 50-67),

b4. with the automatically transmitting of the notification to the first entity including determining whether the first entity has previously subscribed to receive notification of the first travel-related event (Column 1, 50-66); and

b5. automatically transmitting, without user intervention, a notification to a second entity of the second travel-related event (Column 2, 1-16 Examiner considers "real time data system" to be a second entity because Applicant's specification defined systems as entities on Page 3, 1-3. Also, second entity could be, among many things, the "paging system" See Fig 1, 162),

b6. the second entity initiating performance of a second activity in response to occurrence of the second travel-related event (Column 2, 1-16; an alternative embodiment shown with an airline system).

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14. With respect to Claim 3: Nelson discloses wherein the second entity initiates a third response in parallel to multiple heterogeneous systems (Column 4, 34-45).

15. With respect to Claim 4: Nelson discloses

wherein the second event comprises rebooking a passenger on a different flight (Column 4, 35-40 wherein the customer can select from a list of available alternative flights, hence rebooking).

16. With respect to Claim 6: Nelson discloses

automatically transmitting, without user intervention, a notification to the heterogeneous system associated with a third entity of the additional event (Figure 1, 113 and further more this third entity could simply be a notified customer in which Nelson anticipates notifying a "multitude" of entities).

17. With respect to Claim 7: Nelson discloses

wherein the third entity is subscribed to receive the notification (Column 4, 65-67 through Column 5, 1-8 wherein if the third entity is receiving the notification inherently it must be registered to receive it).

18. With respect to Claim 8: Nelson discloses

wherein the notification occurs in real-time (Nelson's invention and notification is in real-time and examples can be found Column 2, 1-5 and Column 4, 60).

19. With respect to Claim 11: Nelson discloses

wherein the heterogeneous system associated with the second entity does not monitor for the occurrence of the first event or the second event (Column 4, 27-31

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where in Nelson discloses a standard paging system and pager which certainly does not monitor for events).

20. With respect to Claim 12: Nelson discloses

wherein the heterogeneous system associated with the second entity is a non-listening-receiving system (Fig. 1, 162 and Column 2, 52-60 and Column 4, 27-31 as the systems disclosed by Nelson, such as phone and paging, certainly are "non-listening" as defined by Applicant's Specification → see page 9, 14-16; wherein non-listening is equal to capable of receiving information).

21. With respect to Claim 13, 16, 19, and 20: Nelson discloses

wherein the automatically transmitting of the notification to the heterogeneous system associated with the second entity includes determining whether the second entity has previously subscribed to receive notification of the second event (Column 3, 50-68 and C4, 50-57 and Column 1, 60-65 "subscribers").

- With respect to Claim 14: Nelson discloses
 CANCELLED.
- 23. With respect to **Claim 15**: Nelson discloses

type of events that is information associated with a plurality of entities, that includes information about a flight being delayed or a baggage claim being changed for an entire flight (Column 2, 40-47),

the second type of events is information associated with only a single entity, that includes information about a person having been rebooked on a particular flight (Column 2, 40-45).

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24. With respect to **Claim 17**: Nelson discloses CANCELLED.

25. With respect to Claim 18: Nelson discloses

the first type of events that is information associated with a plurality of entities, that includes information about a flight being delayed or a baggage claim being changed for an entire flight (Column 2, 40-47),

the second type of events is information associated with only a single entity that includes information about a person having been rebooked on a particular flight (Column 2, 40-45).

26. Claims 1-13 and 15-16 and 18-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Patent No.: 6,633,910 (Rajan).

With respect to Claim 1: Rajan discloses:

A method for notifying entities of events in an integrated event notification system comprised of a plurality of heterogeneous systems, each entity associated with a different one of the heterogeneous systems, (Fig 1 and C3, 30-35) the method comprising:

- a. detecting a first event of a plurality of events, with the detecting of the event including monitoring information from a memory for the occurrence of an event and publishing the first event upon occurrence of the first event (Fig 1, 21-25 are servers that monitor for events and publish to main server 33),
- b. wherein occurrence of the first event triggers occurrence of at least a second event resulting from a first response to the occurrence of the first event; (Once at main

server Fig 1, 33 many events may be triggered all of which would depend upon subscriber rules; C14, 10-65.)

- c. automatically transmitting, in response to the detecting of the first event and without user intervention, a notification to the heterogeneous system associated with a first entity of the first event, the first entity having previously subscribed to receive notification of the first event and initiating the first response to the occurrence of the first event (Fig 1, at this point server 33 would send to a subscriber 39-45 automatically),
- d. with the automatically transmitting of the notification to the heterogeneous system associated with the first entity including determining whether the first entity has previously subscribed to receive notification of the event; (The determining step as shown in Fig 4, 81 "Guard") and
- e. automatically transmitting, without user intervention, a notification to the heterogeneous system associated with a second entity of the second event (Rajan shows possible to send to any entity that has previously subscribed, including a plurality of entities for same and/or different events C6,40-55 and C7, 55-60 and/or C12, 3-5 one or more requests), the second entity initiating a second response to the occurrence of the second event, the second entity having previously subscribed to receive notification of a second type of events comprising the second event, wherein the first type of events is different that the second type of events (C14, 7-65 and C15, 1-65 and C16, 1-65).

Claim Rejections - 35 USC § 103

27. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 28. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 29. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson or Rajan as applied to claim 1-4 and 6-20 above, and further in view of Patent Number: 6,246,320 (Monroe).

Nelson teaches all of the steps claimed with the exception of notifying ground crew and the rescheduling thereof. Monroe teaches the use of an automatic detector of events and event notification system as a convenient method of providing notification to ground crew and rescheduling thereof (Column 2, 30-60 and Column 3, 30-60 and Column 4 29-55). The business practice of rescheduling ground crew based upon the occurrence of an event is an old and well-established business practice. This practice is designed to ensure smooth operation of the airport and maximize efficiency upon unexpected changes. It improves customer relations and helps to generate return business. It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the method of event notification the notification to ground crew as

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taught by Monroe to Nelson, in view of the well known business practice of rescheduling of ground crew based upon the occurrence of an event as set forth above. Note the added steps in Monroe, which would include notifying ground crew of an event, are merely the automation of the old and well known manual process thereof.

Response to Arguments

- 30. This is in response to Applicant's arguments beginning on page 8 of 13 submitted 4/04/2006.
- 31. Note, first however that applicant points to Applicants After Final Advisory Action, 1/11/2006 where Applicant spent nearly three full pages arguing that the references applied did not teach nor suggest publish/subscribe technology nor was the technology old/well known. Examiner responded to Applicant's arguments saying Nelson/Monroe both used subscribe/publish technology and/or further provided evidence the technology was well known with in the art. In this current RCE Applicant has been silent as to this matter in Remarks and has not amended claims in any manner to address the issue. Thus Examiner can only conclude that the Applicant concedes this issue, that publish/subscribe technology was well known with in the art at the time of Applicant's filing date and the use of the technology in an event notification system would not make the invention patentably distinct.

Also Note: Applicant states succinctly in specification that problems to be solved regard a person had to keep checking flight status (pg 2 10-16). Then states [009] "need for a method that automatically and conveniently notifies an entity of a change in travel information when such a change occurs. Examiner clearly shows this need was

filled and exact same method/system was known. Through Nelson/Monroe and/or Rajan standing alone or obvious modification thereto.

- 32. In response to the "Objections to the Drawings" pgs 8-11. The Objection has been withdrawn and arguments are now moot. However see new objections above.
- 33. In response to the Rejections under 102(e), last full P of pg 11 bridging 12 first P; the argument is now moot because the term "response" is now indefinite and the substantive merits cannot be addressed until the claims are made clear. However, Examiner now takes time to show Nelson does provide a situation wherein a first event would trigger the occurrence of a second event. For instance in Nelson teaches that when a flight is cancelled a passenger would be notified of such (first event), then the same passenger would get a notification of a gate change (second event).
- 34. In response to pg 12, first full P; Examiner is unable to address the jumbled assertions, due to the new confusion that is now claimed by the Applicant that a "first type of events" now "includes information about a flight being delayed" rather than merely being the "flight being delayed".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew L. Brooks whose telephone number is (571) 272-8112. The examiner can normally be reached on Monday - Friday; 8 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (571) 272-8112. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MLB

6/24/2006

Naresh Vig Patent Examiner AU 3629

Harest Vig